(IWM – 17) Graded Border Irrigation Application Efficiency Analysis – Example

Example analysis is for an alfalfa field irrigated with a Hi-Flow Turn Out (flow rate is 7.5 cubic feet/second (cfs))

Parameters Analyzed by NRCS Irrigation Program								*Irrigation Program Analysis Results				
Border Width	Border Length	Area Irrigated	Slope (ft./100 ft.)	Soil Intake Family	Roughness Coefficient	Flow per Border	Net Application	Inflow Time	Deep Percolation	Runoff	Gross Application	Application Efficiency
ft.	ft.	acres	%	number	n value	cfs	inches	hour(s)	inches	inches	inches	%
436	600	6.0	0.1	0.6	0.15	7.5	2.0	2.0	0.36	0.11	2.48	81
Enter producer's Site-Specific field parameters								Irrigation Program Analysis Results				

NOTE: It is highly recommended that at least one or two field Irrigation Water Management (IWM) evaluations be conducted. IWM evaluations is crucial baseline information that is needed, in order to properly assess, plan, and implement changes for obtaining increased IWM levels, crop yields, and quality. The following variables are part of the IWM evaluation:

- Crop quality & yield
- Soils (texture & structure)
- Type of irrigation system/efficiency
- Irrigation Water Mgmt. skill
- Water supply & source
- Water Quality
- Irrigation scheduling & constraints
- System Operation & Maintenance
- Labor, Costs, etc.

Irrigation field notes (e.g., acres irrigated, crops, yield, water supply/quality, soils, system O&M, drainage, runoff, ponding, etc.):

(*USDA-NRCS Surface Irrigation System Program was used for the above analysis)